Thunder Mountain Incident

Activity 5-1

Format: Group

Timeframe: 1:00

Description

This activity provides students with an opportunity to become familiar with the risk management process.

Materials

- Incident Response Pocket Guide, NWCG, current edition
- Thunder Mountain Incident worksheet (one per student)
- Conference board/pads with markers/erasers and pencil/pen

Instructions

- 1. Read the Thunder Mountain Incident information provided by your instructor.
- 2. In your group, answer all of the questions for Steps 1-3 of the risk management process.
- 3. Select a spokesperson for your group.
- 4. Be prepared to discuss your answers with the class.

Instructor Notes

- Divide the class into groups.
- Have each group select a spokesperson.
- Have groups read the Thunder Mountain Incident information.
- Call on the groups to present their answers.

Answer Key

Included.

January 2013 Page 1 of 7

Thunder Mountain Incident Worksheet



Division A



Divisions B and C



Division D

Size: 500 acres.

Fuels: Ponderosa pine, grass, slash, and brush.

Exposures: Three structures five miles ahead of the fire.

<u>Terrain</u>: Division A is mostly flat with a few small gullies and ridges. Divisions B and C are located in Roaring River Drainage with steep slopes from river to cliffs at the base of Thunder Mountain on east side of the river. West side has rolling hills on Thunder Mountain plateau.

<u>Access</u>: Road access in Division A is good, with ATVs able to get around most of it. Divisions B and C access is by Roaring River Road and Smith Road intersection. Division D is up Smith Road.

<u>Weather for Today</u>: Temperature 88°F, RH 12%, SE winds @ 12 mph with gusts later in the day, cumulus buildup in the afternoon with a chance of dry lightning.

<u>Hazards and Risks</u>: Snags in Division C; bees in Division D, threatened and endangered species of the deadly "Starback" spider in Division B, power lines in Divisions A and D; air tankers in Division A; helicopter bucket drops southeast side of Roaring River Road; potential for old mineshafts in whole fire area; dusty roads, and drivers have no mountain experience.

<u>Fire Behavior</u>: Early today, in a wind-driven episode, two separate fires burned together to form the Thunder Mountain Incident. Flame lengths of 8 feet were common, ROS observed at 29 chains/hour at one time during a major run. Both of the fires were less than 10 acres at 0130 hours. Expect extreme and erratic fire behavior today and tonight.

Resources: Four Type 1 hand crews and ten Type 3 engines on the fire. Local fire department personnel are involved. The only overhead at this time is a

January 2013 Page 2 of 7

Command 1C

Activity 5-3

local district Fire Chief as the IC with little experience on a fire of this size and engine captains as the Division Supervisors. At present, two air tankers and three helicopters are working the fire.

Communications: Communications is good on all parts of the fire.

History: The last fire in this area burned 10,000 acres 8 years ago at the same time of year.

Answer the following questions. Record your answers to #7 on the conference board/pads.

St	Step 1: Situation Awareness		
1.	Are communications established?		
2.	Who is in charge?		
3.	What was the previous fire history?		
4.	What was the previous fire behavior?		
5.	What is the weather forecast?		

January 2013 Page 3 of 7

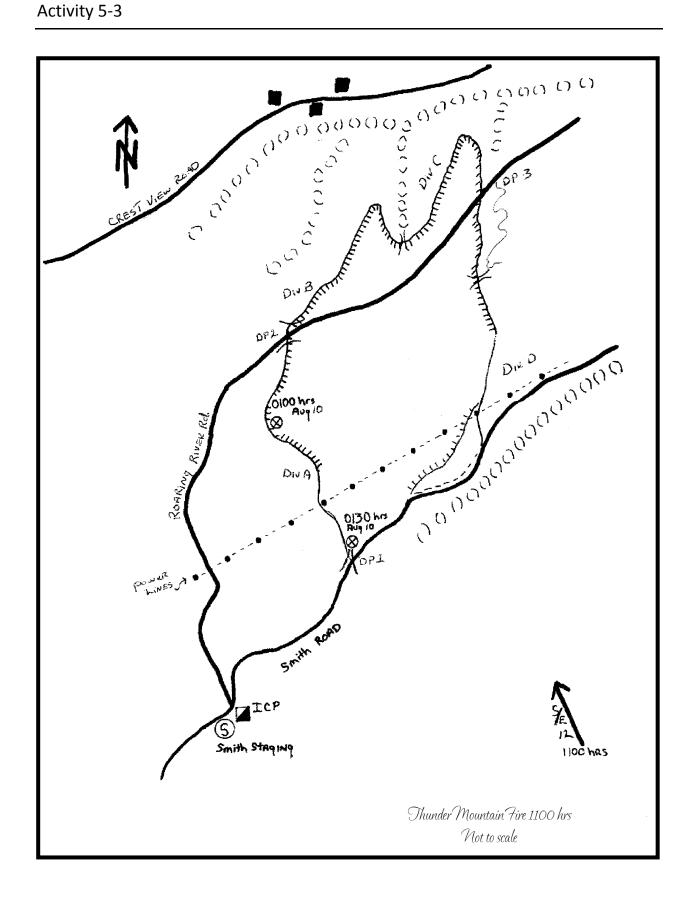
Step 2: Hazard Assessment				
6.	What are the hazards?			
,				

Step 3: Hazard Control

- 7. Where can changes be made to reduce these hazards?
 - Snags
 - Bees
 - Starback spider
 - Power lines
 - Air tankers
 - Helicopter bucket drops
 - Old mineshafts
 - Dusty roads
 - Steep slopes
 - Drivers have no mountain experience
 - IC Is not experienced with this size of fire
 - Span of control is too large
 - Extreme fire behavior
 - Thunderstorms

Record your answers to #7 on the conference board/pads.

January 2013 Page 4 of 7



January 2013 Page 5 of 7

Thunder Mountain Incident Answer Key

Step 1: Situation Awareness

1. Are communications established?

Yes

2. Who is in charge?

Local fire Chief

3. What was the previous fire history?

10,000 acre fire 8 years ago

4. What was the previous fire behavior?

Flame lengths of 8 feet, ROS was observed at 29 chains/hour at one time during a major run. Both of the fires were less than 10 acres at 0130 this morning. Expect extreme and erratic fire behavior today and tonight. The fire has grown from 2 ten-acre fires to 500 acres.

5. What is the weather forecast?

Temps 88° degrees F., RH 12%, Winds SW at 12 m.p.h. w/gusts later in day.

Cumulus buildup in afternoon w/ chance of dry lightning

Step 2: Hazard Assessment

6. What are the hazards?

Snags, bees, deadly "Starback" spider, power lines, air tankers, helicopter bucket drops, old mineshafts, dusty roads, steep slopes, drivers on this fire have no mountain experience, the IC Is not experienced with this size of fire, span of control is too large, extreme fire behavior, thunderstorms that can cause erratic fire behavior and lightning.

January 2013 Page 6 of 7

Step 3: Hazard Control

7. Where can changes be made to reduce these hazards?

Hazard	Mitigation
Snags	Flag and post look outs near snags
Bees	Flag known locations brief crews
Starback spider	Brief crews
Power lines	Avoid if possible
	Contact power company
	Advise aircraft
	Brief crews
Air tankers	Advise crews of air traffic
Helicopter bucket drops	Brief crews
	Post lookouts
Old mineshafts	Safety briefing
	Advise crews working in area
Dusty roads	Water tenders
	Advise drivers to drive slow
	Keep headlights on
Steep slopes	Secure and patrol underslung line
	LCES
Drivers have no mountain experience	Use those drivers in lower areas
	Assign with experienced crew
	Safety briefings
IC Is not experienced with this size of fire	Offer assistance
	Change in command
	Order IMT
Span of control is too large	Order more resources and overhead
	Assign Safety Officer
Extreme fire behavior	LCES in place
	Request field observers
	Change tactics
Thunderstorms	LCES in place
	Assign Safety Officer
	Safety briefing
	-

January 2013 Page 7 of 7